



The Montana Climate Office

Serving Montana with up to date, easy to access climatological information, and resources



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406.2436622



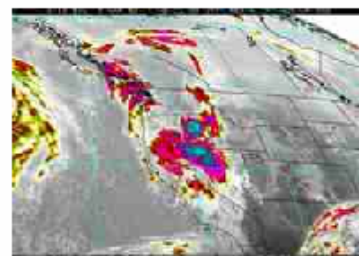
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NOAA Logo, National Environmental Satellite, Data, and Information Service.



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Spotlight:

2006 Rapid City Meeting
June 21-23

General:

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- [Addresses \(PDF\)](#)*

Organization:

- [Executive Board](#)
- [Constitution](#)
- [ARSCO \(PDF\)](#)*
- [ARSCO \(HTML\)](#)

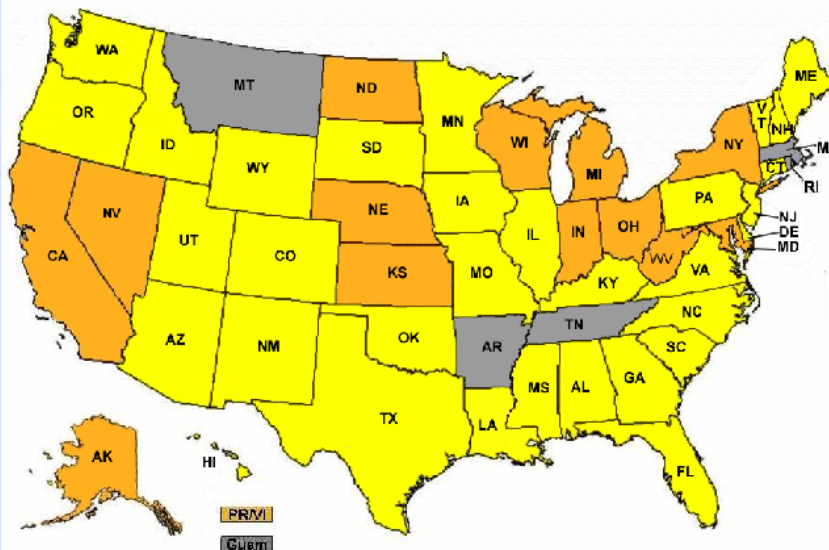
Publications

- [Annual Meetings](#)

Policy Releases:

- [Climate Change and Variability \(PDF\)](#)*
- [2003 Summary \(PDF\)](#)*
- [2004 Summary \(PDF-HiRes\)](#)*

American Association of State Climatologists



Status of AASC Members: May 2005

ARSCO Member SCO Member with Web Link Vacant or no Web Link

Additional Information and Resources:

Climate Prediction Center - Microsoft Internet Explorer

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CPC Seminars
Publications

30-Day Precipitation Accumulation Anomaly (mm) ending 20060302

Related Products
[United States Daily Precipitation Analyses](#)

Local Climate Water & Weather Topics:
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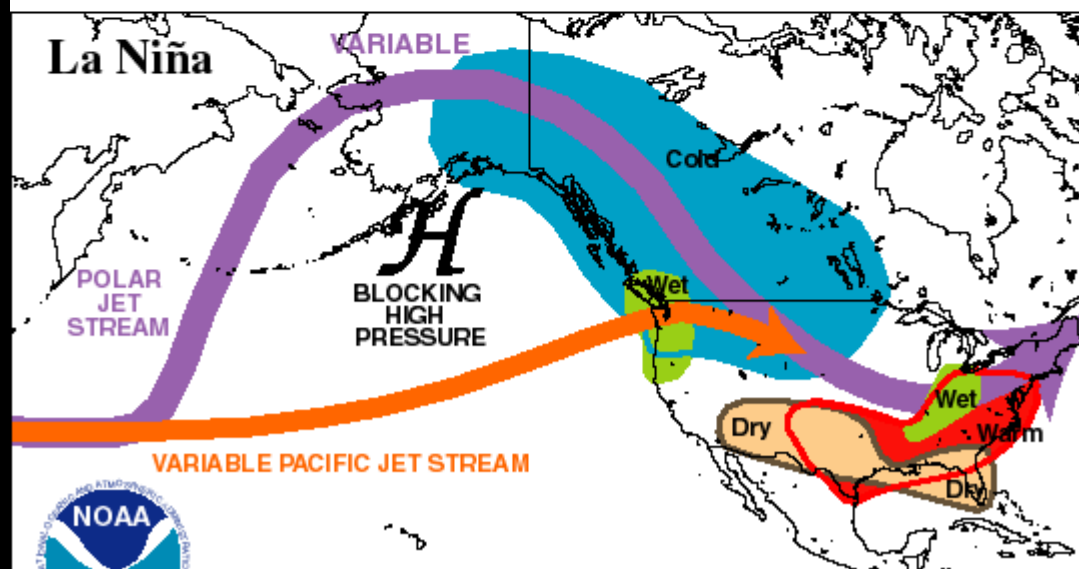
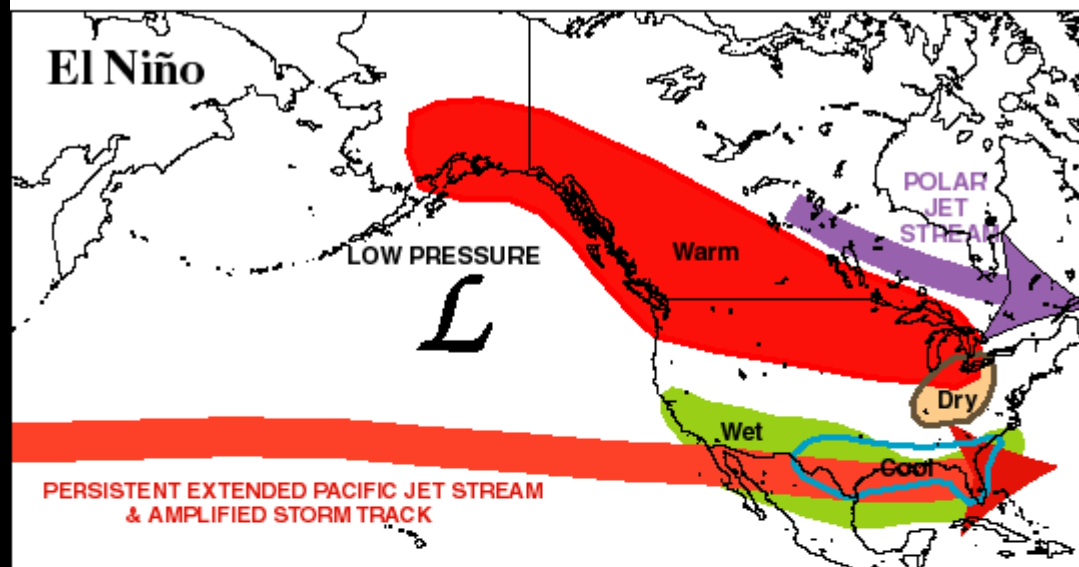
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National Centers for Environmental Prediction
Climate Prediction Center
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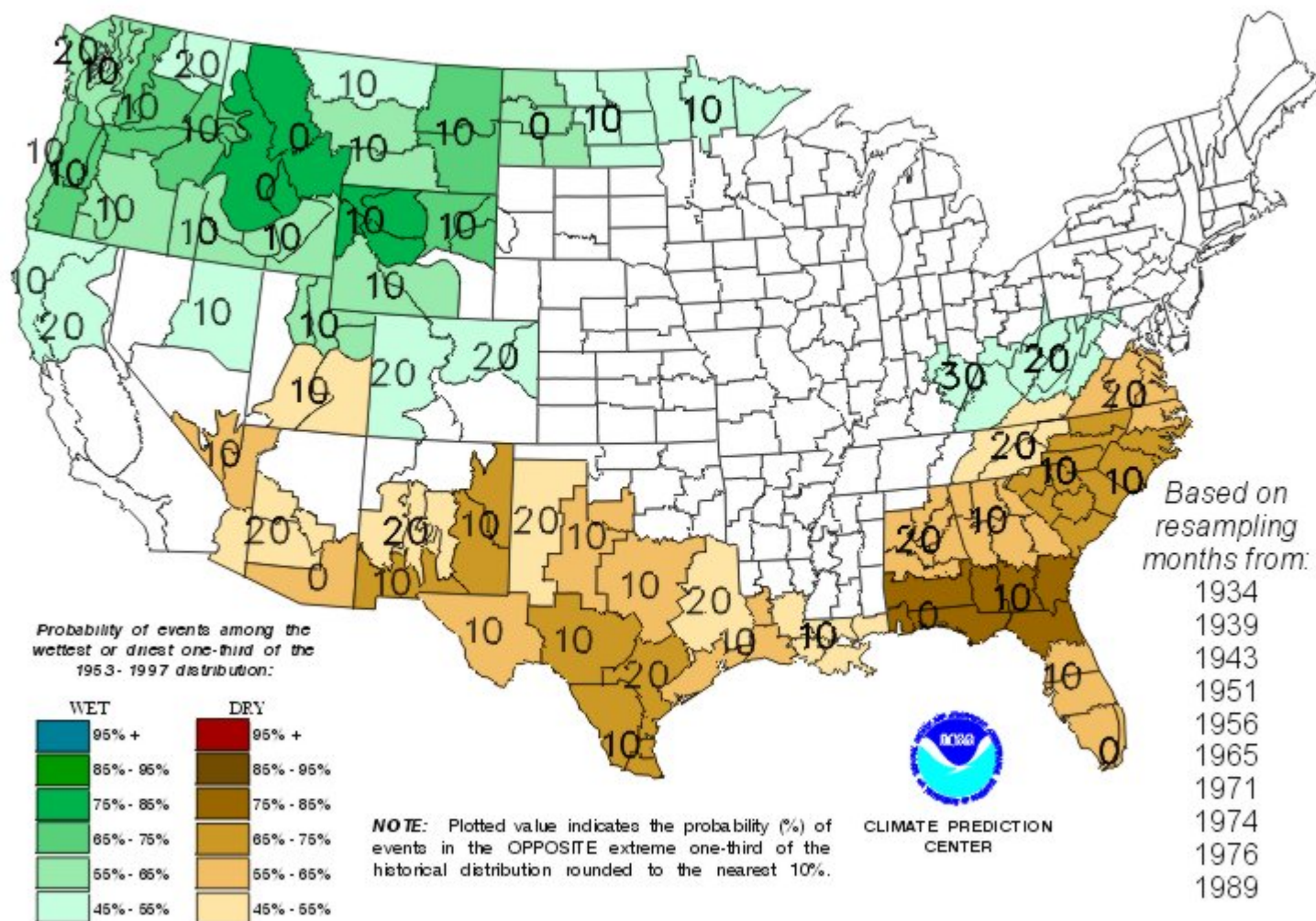
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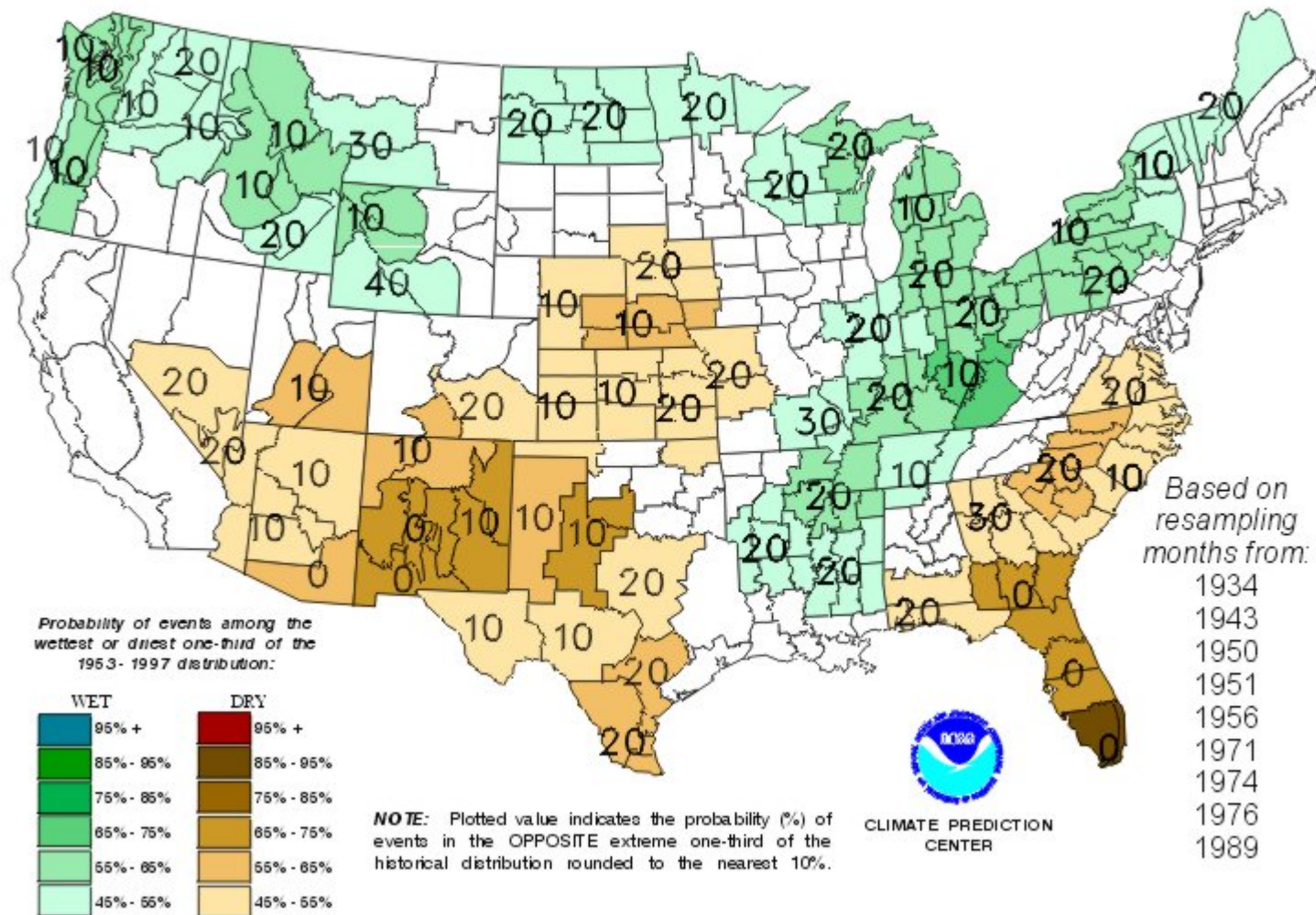
TYPICAL JANUARY-MARCH WEATHER ANOMALIES AND ATMOSPHERIC CIRCULATION DURING MODERATE TO STRONG EL NIÑO & LA NIÑA



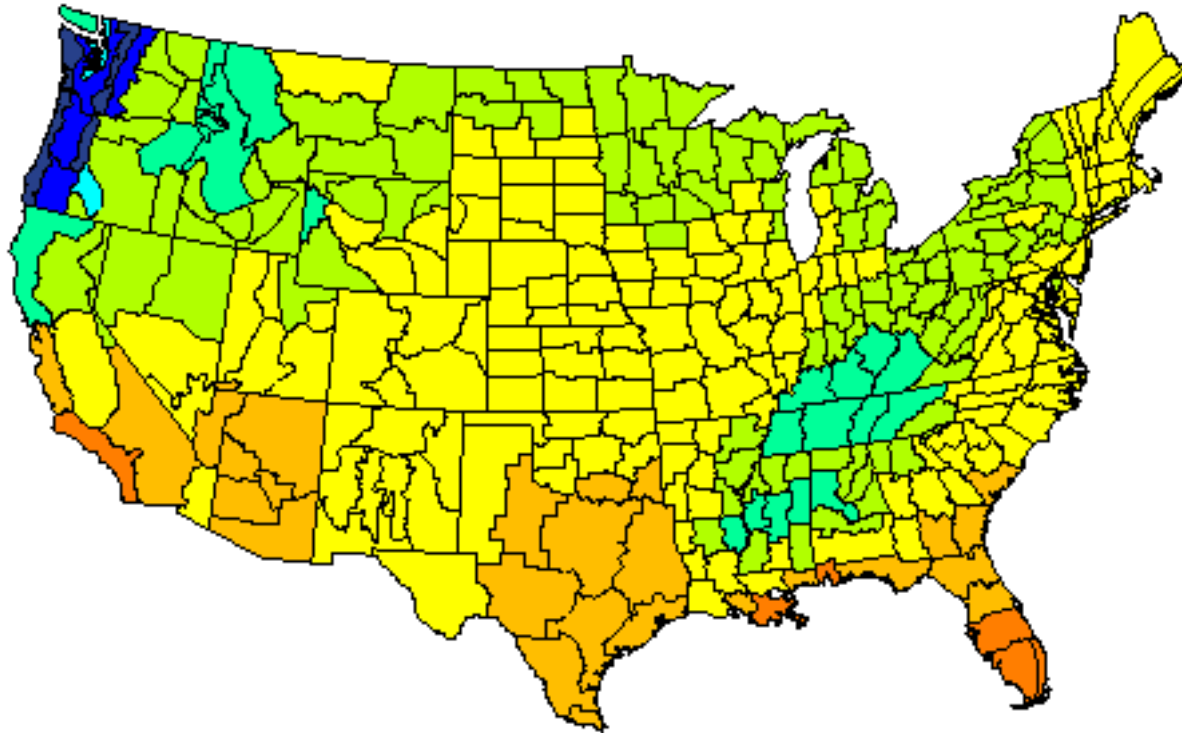
La Niña Precipitation Probabilities -- November - January



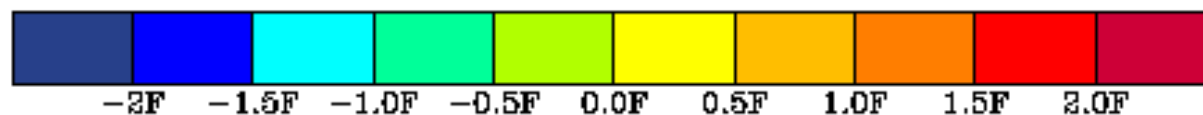
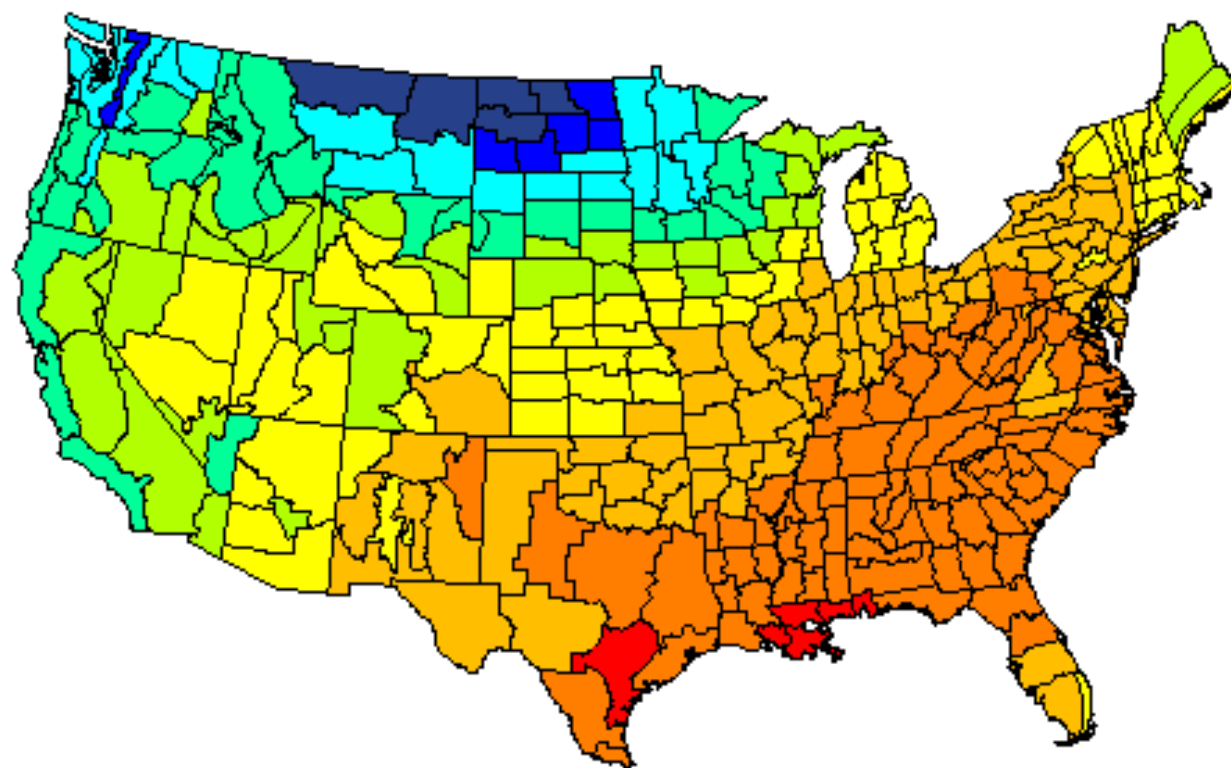
La Niña Precipitation Probabilities – January - March



Composite Precipitation Anomalies
Versus 1950–1995 Longterm Average



Composite Temperature Anomalies
Versus 1950–1995 Longterm Average



NOAA-CIRES/Climate Diagnostics Center



UN Atlas of the Oceans

Language: English

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Major Oscillations

North Atlantic Oscillation

Weather and storm generation

Topic Overview

ID# : 12737

Visits: 1374

Added: 01-Jan-2000

Updated: 09-Dec-2003

E-Mail Topic link

Editors

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Pacific Decadal Oscillation

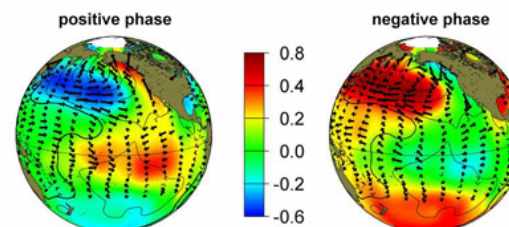
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The Pacific Ocean, the largest of the world's oceans, undergoes recurring, long-term swings in its temperature structure. These temperature shifts include a climate mode called the Pacific Decadal Oscillation, or PDO. It's an El Niño-like temperature shift, but it's more gradual and subtle (about 1- 2 degrees C over 15 - 30 years). Although the temperature change is smaller than that experienced during the El Niño/Southern Oscillation, the Pacific Decadal Oscillation occurs over a much larger area. The largest impacts of the PDO manifest themselves in the pattern of the jet stream across North America and in the dynamics of fishery ecosystems in the North-eastern Pacific. There are two phases associated with the PDO: the positive or 'warm' phase, and the negative or 'cool' phase.

It has been generally agreed upon that the Pacific Ocean has recently entered the cool phase of the PDO. In its negative, or "cool" phase, the PDO is a giant horseshoe-shaped arc of warmer-than-normal water symmetrical about the equator, that stretches from the Aleutians to the South Pacific and encloses a large wedge-shaped area of cooler-than-normal water in the eastern Pacific.

Pacific Decadal Oscillation



The changes in location of large areas of cold and warm water in the Pacific alter the path of the jet stream that provides the steering for storms across North America. During the cool phase, the PDO will steer the jet stream further north over the western United States resulting in decreased precipitation in the southwestern states over the next 20 or so years.

Understanding ocean-atmospheric phenomenon such as the Pacific Decadal Oscillation as part of global climate variability is critical not only to climate forecasting capabilities, but also to deconstructing and separating natural from anthropogenic factors influencing the global climate system.

monthly values for the PDO index: 1900–Nov 2005

